July-23-12 10:14:48 AM

Revision ID:	Crosstube		7TRN embly, Mid Aft		Accept	*N900) 040	100)* s	Setup Star	1/1	S1* S2*
			Start Qty: 1.00 Req'd Qty: 1.00	*1* *1*	: •	Cust Item Customer						
Approvals:	Process	Pla	n: MLJ	Date: 12/07/2	ろ Tooling:	I	Date:	-		tun Star	17	R1*
••				· · · · · · · · · · · · · · · · · · ·			Date:			Stop	` *N	R2*
Sequence ID/ Work Center II)		Operation		Set Up/ Run Hours	To′ ≠D	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stam,
Draw Nbr		Revi	sion Nbr									
D206-667-247		Α	!									
*100 *100**	: <u></u>		MORI SEIKI CNC LAT	HE LARGE	0.00				C	Ø		
Mori Seiki CNC Lat	he Large		2-Turn first	side up per Folio FB030 transition lines smooth.	0.00 DTxxxx on both ends as pe	er Folio FB030				,		angv 12.107 ₁
110			QC1- Inspect dimension:	s to dimension sheet	0.00						n	•
*11 0 *			Memo	r	0.00		7		(_Ø		
Quality Control												angn 12107

													DQA:	Date:	
NCR: Y	'es	/ No					WORK ORDER NON-C	100	VFOR	MANCE / UPI	DATE				
												С	QA Closed:	Date:	
Nork Orde	r:						DISPOSITION				AGAINST I	DEP/	ARTMENT/	PROCESS	
ronk Orac	-						Rework	1		Skid-tube	Crosstube			Water Jet	Engineering
Part N	lo.						Scrap			Machining	Small Fab	一	Prod	d. Eng. Coor.	Quality
	•						Use-as-is		Thern	noforming	Finishing			e/Packaging	Other
NCR N	lo.						Work Order Update			Large Fab	Composite [Supplier	
D 4	T		<u> </u>		0								c: 0		1
Root Cause		Date	Step	Qty	Des		otion of work order update or Non-conformance	ı	Initial lief Eng		tion ription		Sign & Date	Verification	OCInsportor
oc/Data	_	Date	Steb	Qty			n Non-comormance	-	ner Eng	Desci	прион	+	Date	verification	QC Inspector
quip/Tooling	\dashv														
perator	\dashv							1							
laterial		:						ł					ļ		·
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rocess	目														
upplier															
raining															
napproved					<u> </u>										
							F	AUL	T CATE	GORY					•
Landir	<u> </u>						General				•				_
	_	Bending					Bend	<u> </u>	Grain				Ovalized		Pressure/Forced
	_	Centre No	t Concer	ntric to	O/S		BOM/Route	_	Hardwa			_	Over/Under		Temperature/Cure
ļ		Cracks					Broken/Damaged		1	on Incomplete			Part Incorred	 	Weld
1	-	Crushed/0	Crimped.			ø.	Burrs .	<u> </u>	4	ions Incomplete/l	Unclear	— →	Part Lost/Mi	ssing	Wrong Stock Pulled
}	\dashv	Cuffs				100	Contamination	\vdash	Mainte				Part Moved		
}		Heat Trea		T I			Countersink	\vdash	Mislabe				Positioned W		ا
}		Inspection	-	rube			Cut Too Short	\vdash	Misread	1	l		Power Loss/	Surge	Other
}	\dashv	Ripples in		ما ما ما ما ما ما	_		Drill Holes	┝	Offset	Salika a Aira					
}	Torque Waves in Extrusion						Drawing	\vdash	1	Calibration					
1	- 1	Turning Se	equence				Finjsh *	1	JOut of S	Sequence					

Outside Dimensions

Wave/Twist in Tube

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

July-23-12 10:14:48 AM

Item ID: Revision ID:	D206-667-24	47TRN	,	Accept	*N900	1040	100)* s	Setup S		*N	S1*
Item Name:	Crosstube Ass	embly, Mid Aft	·				•		3	Stop	*N:	S2*
Start Date: Required Date: Reference:	23/07/2012 : 06/08/2012	Start Qty: 1.00 Req'd Qty: 1.00	*1* *1*		Cust Item Customer:							
Approvals:	Process Pla	n:	Date:	Tooling:	D	ate:		_ F		Start	*N	R1*
	QC:		Date:	SPC (Y/N):		ate:				Stop	*N	R2*
Sequer III/ Work Center II	D	Operation Description		Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Rejec Qty		Reject Number	Insp. Stamp
*120 *120* Mori Seiki		MORI SEIKI CNC LAT	HE LARGE	0.00					9	8		
Mori Seiki CNC Lat	the Large	2-File down										Maril 12/07/25
130		QC1- Inspect dimensions	s to dimension sheet	0.00		٠.,				•5		
130 QC Quality Control	* * * * * * * * * * * * * * * * * * *	Мето		0.00						3		man, 12/07/29
140 *110*	:	QC8- Inspect parts - seco	ond check	0.00		e Sain e s				ς Δ	is the	
QC Quality Control		Memo		0.00		* *:				0	3	2-7-21

									•	DQA:	Date:	
NCR: Y	'es /	No				WORK ORDER NON-C	ONFOR	MANCE / UPI		QA Closed:	Date:	
Work Orde	er:					DISPOSITION			AGAINST DE			
Part N	 lo					Rework Scrap Use-as-is Work Order Update		Skid-tube Machining moforming Large Fab	Crosstube Small Fab Finishing Composite		Water Jet d. Eng. Coor. re/Packaging Supplier	Engineering Quality Other
Root					Descri	ption of work order update	Initial	Act	tion	Sign &	,	
Cause	Da	te 📙	Step	Qty	(or Non-conformance	Chief Eng	Descr	ription	Date	Verification	QC Inspector
Doc/Data		1										
Equip/Tooling		j l										
Operator												
Material												
Setup		-										
Other												
Process		- []										
Supplier]	·				
Training												
Unapproved												
		ì				F/	AULT CATE	GORY				
Landi	ng Gear	-				General						
	Bend	ling				Bend	Grain			Ovalized		Pressure/Forced
	Cent	re No	t Concer	ntric to	o/s	BOM/Route	Hardw	are		Over/Under	tolerance	Temperature/Cure
	Crac	ks				Broken/Damaged	Inspec	tion Incomplete		Part Incorre	ct	Weld
	Crus	hed/C	rimped.	•		Burrs	Instruc	tions Incomplete/I	Unclear	Part Lost/M	issing	Wrong Stock Pulled
	Cuffs	;				Contamination	Maint	enance		Part Moved		-
	Heat	Treat	t			Countersink	Mislab	eled		Positioned V	Vrong	•

Out of Calibration

Out of Sequence

Outside Dimensions

Misread

Offset

Positioned Wrong

Power Loss/Surge

Other

Turning Sequence

Wave/Twist in Tube

Ripples in Bend

Inspection Strip in Tube

Torque Waves in Extrusion

Cut Too Short

Drill Holes

Drawing

Finish

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

July-23-12 10:14:48 AM

Item ID: Revision ID:	D206-667-24	7TRN		Accept	*N900	1040	100)*	Setup		*N	S1*
Item Name:	Crosstube Ass	embly, Mid Aft		,						Stop	*N:	S2*
Start Date: Required Date: Reference:	23/07/2012 : 06/08/2012	Start Qty: 1.00 Req'd Qty: 1.00	*1* *1*		Cust Item Customer:							
Approvals:	Process Pla	n:	Date:	Tooling:	D	ate:	-		Run	Start	*N	R1*
·	QC:		Date:	SPC (Y/N):		ate:				Stop	*N	R2*
Sequence ID/ Work Center I	D	Operation v Description		Set Up/ Run Hours	Tool I	Tool #	Plan Code	Accept Qty	Rejo Qty		Reject Number	Insp. Stamp
150 HandFXtube Hand Finishing Cro	sstubes	Memo 1- PRESSU	RE WASH X-TUBE INSI	0.00 DE AND OUT		. Ni	0	/	(2)	77/	27	
		2- ACID ET	TCH X-TUBE INSIDE AN	D OUT. USE RED SCOT	CH BRITE							
*160 *160*		QC5- Inspect part comp	leteness to step on W/O	0.00 PAS	ساساء							
QC Quality Control		Memo		0.00	121427					 ,		
170 * 17 0*		Packaging		0.00								
Packaging ,		Memo Identify and Location:	stock in kanban rack	0.00	M	0	12	7-7	2/2	27		,

										DQA:	Date:	
NCR:	Yes / No				WORK ORDER NON-	COI	NFORI	MANCE / UPDATE				
										QA Closed:	Date:	
Work Ord	er:				DISPOSITION			AGAIN	IST DE	PARTMENT	PROCESS	
Part I	No				Rework Scrap Use-as-is Work Order Update		Thern	Skid-tube Crosstu Machining Small F noforming Finish Large Fab Compos	ab ing	Pro	Water Jet d. Eng. Coor. e/Packaging Supplier	Engineering Quality Other
Root				Descri	ption of work order update	1	nitial	Action		Sign &		
Cause	Date	Step	Qty	,	or Non-conformance	Ch	ief Eng	Description		Date	Verification	QC Inspector
Doc/Data							•					
Equip/Tooling		į		1								
Operator												
Material												
Setup												
Other												
Process					·			·				
Supplier											:	
Training				}								
Unapproved												
					F	AUI	T CATE	GORY			•	
Landi	ng Gear				General		_	•		_	·	_
	Bendin	3			Bend		Grain			Ovalized		Pressure/Forced
	Centre	Not Conce	ntric to	o/s	BOM/Route		Hardwa	re		Over/Under	tolerance	Temperature/Cure
	Cracks				Broken/Damaged		Inspecti	on Incomplete		Part Incorred	ct 🗌	Weld
	Crushe	d/Crimped			Burrs		Instruct	ions Incomplete/Unclear		Part Lost/Mi	ssing	Wrong Stock Pulled
	Cuffs			Γ	Contamination		Mainte	nance		Part Moved	<u> </u>	-
	Heat Tr	eat			Countersink		Mislabe	led		Positioned V	Vrong	

Misread

Out of Calibration

Out of Sequence

Outside Dimensions

Offset

Power Loss/Surge

Other

Ripples in Bend

Turning Sequence

Wave/Twist in Tube

Inspection Strip in Tube

Torque Waves in Extrusion

Cut Too Short

Drill Holes

Drawing

Finish

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

July-23-12 10:14:48 AM

Page 4

Item ID: D206-667-247TRN Accept *N900040100* Setup Start **Revision ID:** Crosstube Assembly, Mid Aft Item Name: 23/07/2012 Start Qty: 1.00 *1* **Start Date: Cust Item ID:** Required Date: 06/08/2012 Req'd Qty: 1.00 **Customer:** Reference: Run Approvals: Date: Tooling: Date: Stop Date: SPC (Y/N): Date: Sequence 1/2/ Operation Set Up/ Tool ID Tool # Plan jectپ Reject Insp. Accept Work Center ID Description **Run Hours** Code Qty ₹.y Number Stamp 180 QC21- Final Inspection - Work Order Release 0.00 *180* QC 0.00 Memo Quality Control

MF 12-09-27

									DQA:	Date:	
NCR: Yes	/ No				WORK ORDER NON-C	CONFORM	MANCE / UF		QA Closed:	Date:	
Work Order:					DISPOSITION			AGAINST DE	PARTMENT	PROCESS	
Part No.					Rework Scrap Use-as-is Work Order Update	Thern	Skid-tube Machining noforming Large Fab	Crosstube Small Fab Finishing Composite		Water Jet d. Eng. Coor. e/Packaging Supplier	Engineering Quality Other
Root				Descri	ption of work order update	Initial	Ad	ction	Sign &		
Cause	Date	Step	Qty		or Non-conformance	Chief Eng	Des	cription	Date	Verification	QC Inspector
Doc/Data											
quip/Tooling]										
Operator											
Material											
Setup											
Other											
Process]										
Supplier]										
Training	1 :					ľ					

Landing Gear General Bending Bend Grain Ovalized Pressure/Forced Centre Not Concentric to O/S BOM/Route Over/Under tolerance Temperature/Cure Hardware Cracks Broken/Damaged Inspection Incomplete Weld Part Incorrect Crushed/Crimped. Burrs Instructions Incomplete/Unclear Part Lost/Missing Wrong Stock Pulled Cuffs Contamination Maintenance Part Moved Heat Treat Countersink Mislabeled Positioned Wrong Inspection Strip in Tube Cut Too Short Power Loss/Surge Other Misread Drill Holes Ripples in Bend Offset Torque Waves in Extrusion Drawing Out of Calibration Turning Sequence Finish Out of Sequence

Outside Dimensions

FAULT CATEGORY

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Wave/Twist in Tube

Folio

Unapproved

Picklist Print

July-23-12 10:14:52 AM

Work Order ID: 88003

D206-667-247TRN

Parent Item Name: Crosstube Assembly, Mid Aft

88003

LG

D206-667-247TRN

Start Date: 23/07/2012

Required Date: 06/08/2012

Start Qty: 1.00

Required Qty: 1.00

Comments:

Parent Item:

IPP rev:A 11.01.06 new issue DD verf:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D6004-115		Manufactured	No			100	Each	75.0000	I	1			
D6004-11	5	•							**				

Crosstube Material

Location Loc Oty Loc Code 75 I mgn 12/07/24 34

Page 1

						•					DQA.	Date.	
NCR:	Yes	/ No				WORK ORDER NON-C	O	NFORM	AANCE / UPDA	ATE	QA Closed:	Date	
												Date:	
Work Ord	er:					DISPOSITION				AGAINST DE	PARTMENT,	PROCESS	
Part I	•					Rework Scrap			Skid-tube Machining	Crosstube Small Fab	Pro	Water Jet d. Eng. Coor.	Engineering Quality
NCR I	No.					Use-as-is Work Order Update			noforming Large Fab	Finishing Composite	Rec/Sto	re/Packaging Supplier	Other
Root					Descri	ption of work order update	Ī	nitial	Actio	n	Sign &		
Cause		Date	Step	Qty	C	or Non-conformance	Ch	ief Eng	Descrip	tion	Date	Verification	QC Inspector
Doc/Data	Ш		1										
Equip/Tooling	Ш												
Operator	or 🔲 📗					·	ĺ						
Material									·				
Setup	Ш					•							
Other									,				
Process							İ		•				
Supplier													
Training													
Unapproved												·	
ļ						F	AUL	T CATE	GORY				
Landi	ng (Gear				General		-			-		-
	Ш	Bending				Bend		Grain			Ovalized		Pressure/Forced
		Centre No	t Conce	ntric to	o/s	BOM/Route		Hardwa	re		Over/Under	tolerance	Temperature/Cure
		Cracks				Broken/Damaged		Inspecti	on Incomplete		Part incorre	ct	Weld
Crushed/Crimped_					Burrs **		Instruct	ions Incomplete/Un	clear	Part Lost/M	issing	Wrong Stock Pulled	
. •		Cuffs				Contamination		Mainte	nance		Part Moved		
		Heat Trea	t			Countersink		Mislabe	led		Positioned \	Vrong	
	Heat Treat Inspection Strip in Tube					Cut Too Short		Misread	١		Power Loss/	Surge	Other

Offset

Out of Calibration

Out of Sequence

Outside Dimensions

DOA.

Turning Sequence

Wave/Twist in Tube

Ripples in Bend

Torque Waves in Extrusion

Drill Holes

Drawing

Finish

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

DART AEROSPACE LTD	Work Order:	28C03
Description: Crosstube Assembly, Mid A	Part Number:	D206-667-247TRN
Inspection Dwg: D206-667-247 Rev: A		Page 1 of 2

FIRST ARTICLE INSPECTION CHECKLIST

	spection Sheet wing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
	2.490	+0.005/-0.000	2.4,45			vern	CNK-08
	2.025	+0.005/-0.000	2-030	7			
	2.079	+0.005/-0.000	2.084	/			
	2.145	+0.005/-0.000	2-150	/		-	
	2.209	+0.005/-0.000	2-214	-			
[2.287	+0.005/-0.000	2.292	/			
∢	2.363	+0.005/~0.000	2.367	ر		J	
SIDE							
ଊ	0.200	+/-0.010	,200	/		V4(1)	cue-08
Ī	R0.063	+/-0.010	-063			RIZ	000203
Ī	R2.00	+/-0.010	2.00			1	
	R0.063	+/-0.010	.063),	
	4.438	+/-0.010	4.440	2		vern	CNC-08
							CNC-00
	2.490	+0.005/-0.000	2.493	一 フー		vern	0 N C -08
Ì	2.025	+0.005/-0.000	2029	V		1	07000
Ī	2:079	+0.005/-0.000	2.684				
	2.145	+0.005/-0.000	2.150	7			
Ì	2.209	+0.005/-0.000	2.214				
	2.287	+0.005/-0.000	2.292	1			
m	2.363	+0.005/-0.000	2.367		·	1/	
SIDE			2007			V	
S	0.200	+/-0.010	-200	1		vern	CWC-OX
	R0.063	+/-0.010	.063			RU	
	R2.00	+/-0.010	2.00			1	`.
ľ	R0.063	+/-0.010	:063			1	
	4.438	+/-0.010	4,440			VELU	C.NC - 04
-	***					~ (\\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	ewer of
	99.76	+/-0.020	99.755			tape	16-22

												DQA:	Date:	
NCR:	Yes	/ No					WORK ORDER NON-	COI	NFORM	MANCE / UP	DATE	QA Closed:	Date:	
							DISPOSITION				AGAINST DE		 	
Vork Ord	er:						<u></u>	,				, , , , , , , , , , , , , , , , , , ,		
Part	No.			-		•	Rework Scrap Use-as-is		ſ	Skid-tube Machining noforming	Crosstube Small Fab Finishing		Water Jet d. Eng. Coor. re/Packaging	Engineering Quality Other
NCR	No.					-	Work Order Update]		Large Fab	Composite		Supplier	
Root					Des	cri	otion of work order update	П	nitial	Act	tion	Sign &		
Cause		Date	Step	Qty			or Non-conformance	Ch	ief Eng	Desci	ription	Date	Verification	QC Inspector
oc/Data											·			
uip/Tooling							•							
perator													1	
laterial														
etup														
ther													1	
rocess			İ				e e e e e e e e e e e e e e e e e e e							
upplier	L													}
raining	L										•			
napproved	<u> </u>			<u> </u>				<u> </u>					I	1
		•					F	AUL	T CATE	GORY				
Land	ing (Gear				_	General	_	,			7		_
	L	Bending					Bend	\perp	Grain			Ovalized		Pressure/Forced
	_	Centre No	ot Concei	ntric to	O/S	L	BOM/Route	<u>_</u>	Hardwa			Over/Under	 	Temperature/Cure
	<u></u>	Cracks					Broken/Damaged	\vdash	4 '	on Incomplete		Part Incorre		Weld
		Crushed/Crimped.					Burrs	ļ	4	ions Incomplete/	Unclear	Part Lost/Mi	_	Wrong Stock Pulled
		Cuffs					Contamination	\vdash	Mainte			Part Moved		
	<u></u>	Heat Treat					Countersink	_	Mislabe			Positioned V		7
		Inspection Strip in Tube					Cut Too Short		Misread	i	· L	Power Loss/	'Surge	Other
		Ripples in					Drill Holes	<u></u>	Offset					
	_	Torque W			n	_	Drawing		4	Calibration				
		Turning S	equence			1	Finish		Out of 9	Sequence				

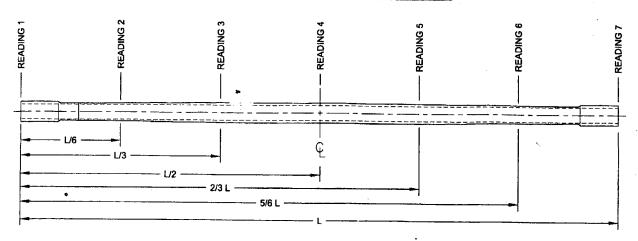
Outside Dimensions

Wave/Twist in Tube

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

DART AEROSPACE LTD	Work Order:	88003
		-0000
Description: Crosstube Assembly, Mid Aft	Part Number:	D206-667-247TRN
•		
Inspection Dwg: D206-667-247 Rev: A		Page 2 of 2

WALL THICKNESS MEASUREMENT



	WALL	THICKNESS	MEASUREME	NT (IN)	Deviation	
Location	w1	w2	w3	w4	Δw (max-min)	TOLERANCE
READING 1 L= 0"	.366	.354	.348	353	,018	
READING 2 L= ((.164	.154	.158	.162	.010	
READING 3	.297	,217	,247	. 2.52	-010	
READING 4	,366	. 755	.352	- 358	,014	0.045"
READING 5 L= みイ	,270	-264	-233	.238	.037	
READING 6 L= (4773	164	-146	.154	,027	
READING 7	,768	. 348	. 343	358	-625	

Calibration Result

Actual Block Thickness:

Sitescan 250 Measured Thickness:

Measured by: Mark | Audited by: Date: Preliminary Approval: Date: 12-7-26 | Date: 12-7-26 | Date:

evised by	Approved
J	
J . A	
	- N (
	(J / DA)

NCR:	Yes / No	WORK ORDER NON-CONI	:OI
NA combo		DISPOSITION	

Folio

												DQA:	Date	e:	
NCR:	Yes	/ No					WORK ORDER NON-C	100	NFORM	MANCE / UPI	DATE	OA Clasadi	Dot		
									<u> </u>			QA Closed:	Date	e:	
Vork Ord	ler:						DISPOSITION				AGAINST DE	PARTMENT	/PROCESS		
							Rework	1		Skid-tube	Crosstube	Water Jet			Engineering
Part	No.						Scrap]	ſ	Machining	Small Fab	Pro	d. Eng. Coor.		Quality
							Use-as-is			noforming	Finishing	Rec/Sto	re/Packaging		Other
NCR	NCR No.						Work Order Update			Large Fab	Composite	_	Supplier		
Root					Des	crii	otion of work order update		Initial	Act	rion	Sign &		<u> </u>	
Cause		Date	Step	Qty			or Non-conformance		ief Eng		ription	Date	Verification	, ;	QC Inspector
oc/Data				1											
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aterial														1	
etup														•	
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ocess		ļ	j												
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aining		}										9			
napproved	—														
				1			F	AUL	T CATE	GORY		.1			
Land	ing (Gear		-			General					······································			
		Bending					Bend		Grain			Ovalized		Pi	ressure/Forced
		Centre No	ot Concer	ntric to	o/s		BOM/Route		Hardwa	re	·	Over/Under	tolerance	Τe	emperature/Cure
		Cracks					Broken/Damaged		Inspecti	on Incomplete		Part Incorre	ct	٦v	/eld
	Crushed/Crimped.						Burrs		Instruct	ions Incomplete/l	Jnclear ·	Part Lost/Mi	issing	\neg $_{w}$	rong Stock Pulled
	Cuffs						Contamination		Mainte	nance		Part Moved	i i		
	Heat Treat						Countersink		Mislabe	led		Positioned V	Vrong		
	Inspection Strip in Tube						Cut Too Short		Misread			Power Loss/Surge		По	ther
		Ripples in	Bend				Drill Holes		Offset		_	_		-	
		Torque W	aves in E	xtrusio	n		Drawing		Out of C	Calibration					
		Turning So	equence				Finish	Г	Out of S	equence					

Outside Dimensions

Wave/Twist in Tube

Item	Qty -247	Part Number	Description
1	х	D206-667-247	CROSSTUBE ASSEMBLY (206L MID AFT)
2	1	D6004-115	CROSSTUBE
3	2	D2873-043	NUT PLATE
4	2	D2873-045	NUT PLATE
5	2	D2892-1	SUPPORT
6	4	D3595-063-450	RUBBER CUSHION
7	4	MS21920-22	CLAMP
8	14	MS20601AD4W10	RIVET (OR NAS9302B-4-10)
9	A/R	MAGNOBOND 6398	ROCKWELL SPECIFICATION RBO-120-023 ADHESIVE (TEXTRON/BELL SPEC. 299- 947-100, TYPE II, CLASS 2 ADHESIVE)

GENERAL NOTES:

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В

- MATERIAL: MANUFACTURED FROM D6004-115
 - FINISHED LENGTH = 99.76±0.020
- FINISHED LENGTH = 99,7640,020
 FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
 PRIME INSIDE AND OUTSIDE PER DART QSI 005 4.2
 PAINT OUTSIDE PER DART QSI 005 4.2
 TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.
 UNITS: INCHES UNLESS OTHERWISE NOTED.
 BREAK SHARP EDGES: 0.005 TO 0.010 MAX.

- IDENTIFICATION: SCRIBE DART PART NUMBER "D206-667-247" AND BATCH NUMBER ON
- INSIDE OF CUFF PER DART QSI 044 6.4 (VIBRATING STYLUS). WEIGHT: 21.1 lbs (-607 = 17.7 lbs)
- PART IS SYMMETRIC ABOUT CENTERLINE.
- RUN CUTTER OFF PART WHERE INDICATED. BLEND OUT EDGE LONGITUDINALLY, TRANSITION SHOULD BE SMOOTH.
- 10) BEND PROGRESSIVELY WITH A MINIMUM OF 10 PASSES. MAXIMUM TUBE FLATTENING DUE TO BENDING IS 6% BASED ON O.D.

 11) LIQUID PENETRAL'T II SPECT OUTSIDE SURFACE OF CROSSTUBE PER QSI 038.
- 12) INSTALL D2892-1 SUPPORT USING 0.03° TO 0.06° THICK LAYER OF MAGNOBOND 6398 PER QSI 015. LET CURE FOR 12 HOURS AFTER INSTALLATION AND PRIOR TO PACKAGING.
- 13) INSTALL MS21920-22 CLAMPS WITH D3595-063-450 RUBBER CUSHIONS TO SECURE THE D2892-1 SUPPORT ON TOP SIDE OF THE CROSSTUBE. ENSURE CLAMP MECHANISMS ARE LOCATED ON CROSSTUBE SUPPORTS.
- 14) EXTREME CARE MUST BE TAKEN TO PROTECT THE OUTSIDE SURFACE OF THE TUBE. THE OUTSIDE SURFACE MUST BE SMOOTH AND FREE FROM SURFACE DEFECTS SUCH AS SCRATCHES, NICKS, OR DENTS. DEFECTS UP TO 0.005" MAY BE BLENDED OUT LONGITUDINALLY. CIRCUMFERENTIAL GRIND MARKS ARE UNACCEPTABLE.
- 15) TORQUE CLAMPS 80 TO 100 IN-LB. ENSURE AT LEAST 1.5 THREADS ARE SHOWING IN SAFETY AND THAT NUT HAS NOT BOTTOMED-OUT AFTER TORQUING.

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WORK ORDER
88003 MC12/07/23

BCW#(1-615 11.07.28

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REV.			DESCRIPTION	BY	DATE							
DESIGN		P	DART AFROSE	DART AEROSPACE LTD								
DRAWN		92	HAWKESBURY, ONTA									
CHECKE	ED (DRAWING NO.		REV. A							
MFG. AF	PR.	O.	D206-667-247	5	SHEET 1.OF 4							
APPRO\	/ED	who	TITLE		SCALE							
DE APP	R.		CROSSTUBE ASSY (206L	MID AF	T) NTS							
DATE	10.12	2.23	COPYRIGHT @ 2010 BY DART AEROSPACE LTD THIS OCCURENT IN PRIVATE AND COMPORTUDING AND IS SHIPLUD ON THE EXPRESS CONDITION THAT'S NOT TO BE USED FOR ANY PURPOSE ON COPIED ON COMPANIENTED TO ANY OTHER PERSON WITHOUT THE PERSO									

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NCR:	Yes	/ No				WORK ORDER NON-	-CO	NFORN	MANCE / UP	DATE			
											QA Closed:	Date:	
Work Orde	er:					DISPOSITION				AGAINST DI	EPARTMENT,	/PROCESS	
Part No.						Rework Scrap Use-as-is Work Order Update	Therm	Skid-tube Crosstube Machining Small Fab Thermoforming Finishing			Water Jet d. Eng. Coor. re/Packaging Supplier	Engineering Quality Other	
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Root Cause Doc/Data		Date	Step	Qty		ption of work order update or Non-conformance	1	Initial nief Eng		tion ription	Sign & Date	Verification	QC Inspector
Equip/Tooling Operator Material Setup Other Process Supplier Training Unapproved													
							FAU	LT CATE	GORY				
Landing Gear Bending Centre Not Concentric to O/S Cracks Crushed/Crimped Cuffs Heat Treat Inspection Strip in Tube Ripples in Bend Torque Waves in Extrusion				General Bend BOM/Route Broken/Damaged Burrs Contamination Countersink Cut Too Short Drill Holes Drawing		Instruct Mainte Mislabe Misread Offset	on Incomplete ions Incomplete/ nance led	Unclear	Ovalized Over/Under Part Incorre Part Lost/M Part Moved Positioned V	ct sissing Vrong	Pressure/Forced Temperature/Cure Weld Wrong Stock Pulled Other		

Out of Sequence

Outside Dimensions

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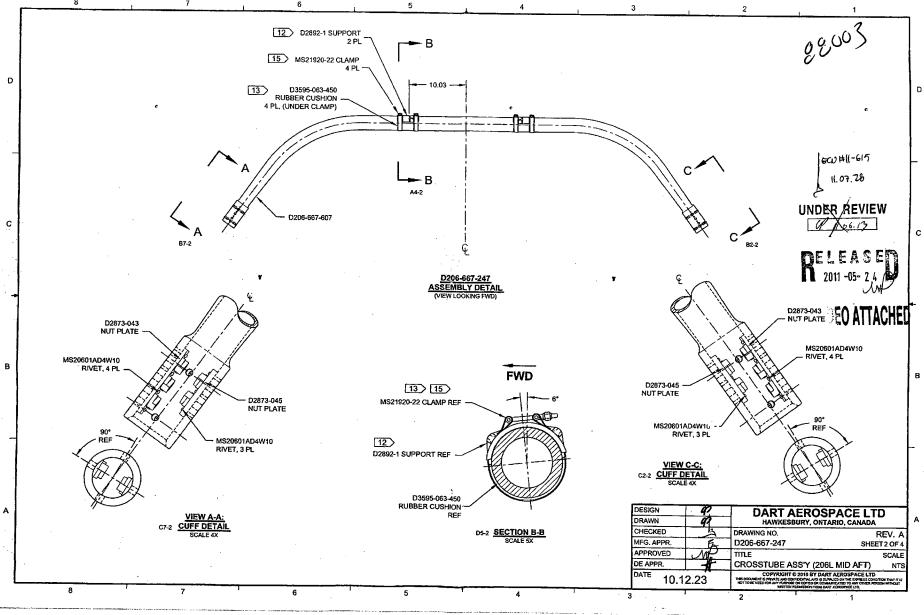
Date:

Turning Sequence

Wave/Twist in Tube

Finish

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		Turning S	Sequence	!			Finish		Out of S	iequence	•					

Outside Dimensions

Wave/Twist in Tube

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SECTION G-G

SCALE 5X

APPROVED

10.12.23

DE APPR.

DATE

TITLE

CROSSTUBE ASS'Y (206L MID AFT)

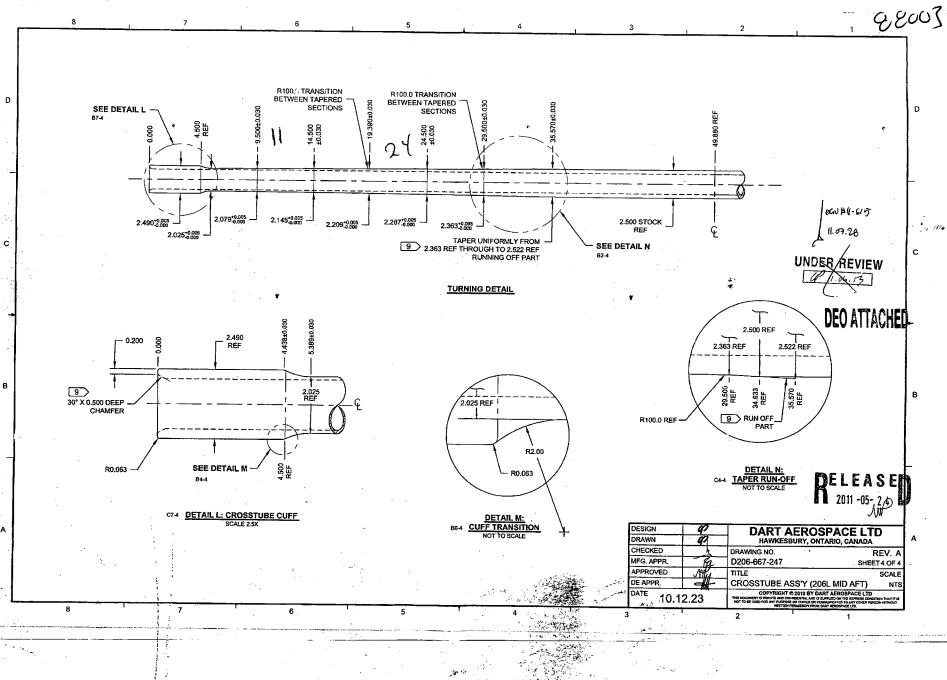
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SCALE

				DQA:	[Date:	
NCR:	Yes /	No	WORK ORDER NON-CONFORMANCE / UPDATE				

									QA Closed:	Date):		
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20414/1140						
DRAWING		REV. A	DART AEROSPACE LTI	D.E.O. NO.	SHEET NO.	SCALE
D206-66	7-247 CROSS	STUBE ASS'Y (206L MID AFT)	ENGINEERING ORDER	D206-667-247-A-1	SHEET 1 OF 1	NTS
DRAWN	qp	CHECKED AS	MFG. APPR.	APPROVED : 1 NA	DE APPR.	
DATE	11.07.15	DATE 11.07.20	DATE 11:07:21	DATE 1/07/21	DATE 11.07-21	

PURPOSE:

REPLACE MAGNOBOND WITH PROSEAL

CHANGE:

IS

Item	Qty -247	Part Number	Description
9	A/R	PROSEAL 890 B-2	SEALANT, AMS-S-8802 CLASS B-2

WAS:

9	A/R	MAGNOBOND 6398	ROCKWELL SPECIFICATION RBO-120-023 ADHESIVE (TEXTRON/BELL SPEC, 299-947-100, TYPE II, CLASS 2 ADHESIVE)

NOTE 12 & 15, SHEET 1 IS AMENDED AS FOLLOWS:

IS:

- 12) TO INSTALL D2892-1 SUPPORT: ABRADE MATING SURFACE OF SUPPORT AND CROSSTUBE: WITH 180-GRIT SANDPAPER AND REMOVE RESIDUE WITH MEK (OR EQUIVALENT). APPLY A 0.04" TO 0.07" THICK LAYER OF PROSEAL 890 CLASS B-2 (OR AMS-S-8802 CLASS B-2) SEALANT TO MATING SURFACE OF SUPPORT.
- 15) TORQUE CLAMPS 80 TO 100 IN-LB. ENSURE AT LEAST 1.5 THREADS SHOWING IN SAFETY AND THAT NUT HAS NOT BOTTOMED-OUT AFTER TORQUING. PRIOR TO PACKAGING, RE-CHECK TORQUE ON CLAMPS AFTER PROSEAL 890 SEALANT HAS CURED FOR 72 HOURS.

WAS:

- 12) INSTALL D2892-1 SUPPORT USING 0.03° TO 0.06° THICK LAYER OF MAGNOBOND 6398 PER QSI 015. LET CURE FOR 12 HOURS AFTER INSTALLATION AND PRIOR TO PACKAGING.
- 15) TORQUE CLAMPS 80 TO 100 IN-LB. ENSURE AT LEAST 1.5 THREADS SHOWING IN SAFETY AND THAT NUT HAS NOT BOTTOMED-OUT AFTER TORQUING.



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							Rework	1		Skid-tube Crosstube	$\overline{}$	W	ater Jet	Engineering		
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		Cracks					Broken/Damaged		Inspect	ion Incomplete	Part Inco	rect		Weld		
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		Cuffs					Contamination		Mainte	enance	Part Moved					
		Heat Trea	t '	. "	-		Countersink		Mislabe	eled	Positioned Wrong			_		
		Inspection	n Strip-in	Tube			Cut Too Short		Misread	d l	Power Lo	Power Loss/Surge Oth				
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		Turning Se	equence				Finish		Out of 9	Sequence			-			
	Wave/Twist in Tube						Folio		Outside	Dimensions	-					

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